CLAIMS

1. An electronic mathematical model builder comprising

a memory for storage of data,

a processor for defining addressable sets of cells stored in the memory with a unique identifier, for entering data into the cells and for processing data stored in the cells,

a user interface with a display for displaying sets of cells in a work area and means for creating and positioning sets of cells in the work area and means for specifying data to be entered into the cells, and

a function builder for building mathematical relations between cells, comprising fields for user specification of a desired function by mathematical operators and input variables of the function, and a set of destination cells for containing values of the function.

2. A model builder according to claim 1, wherein the function builder comprises components for selection by the user for specification of the function.

3. A model builder according to claim 2, wherein at least one component is a function component selected from the group consisting of mathematical operators, mathematical functions, logical and Boolean functions, financial functions, string functions, and data base functions.

4. A model builder according to claim 3, wherein the function component is a Java class that encapsulates the calculation of a specific function, e.g. a financial or mathematical function, and the data that is input for the function.

5. A model builder according to any of claims 2-4, wherein at least one component is a data component including data of a set of cells.

6. A model builder according to claim 5, wherein the data component is a Java class that holds an object reference to a specific data source, e.g. a set of cells or an external database.

7. A model builder according to any of the preceding claims, further comprising data components including data from an external data source.

8. A model builder according to any of the preceding claims, wherein the function builder comprises graphical symbols relating to respective components for selection by the user to be incorporated into the desired function.

9. A model builder according to claim 8, wherein the graphical symbols relating to respective components are organized under various tabs according to their type.

10. A model builder according to claim 8, wherein the graphical symbols relating to respective components are organized in a graphical, hierarchical diagram according to their type.

11. A model builder according to any of claims 8-10, wherein components are selected by dragging and dropping the corresponding graphical symbols into the function field of the function builder.

12. A model builder according to any of the preceding claims, wherein the function builder comprises tools for specification of calculation type, such as by row, by column, all cells in a panel, selected cells in a panel, accumulated or non-accumulated.

13. A model builder according to any of the preceding claims, wherein the user interface comprises means for naming functions built with the function builder.

14. A model builder according to claim 13, further comprising means for storage and retrieval of functions in the memory.

15. A model builder according to any of the preceding claims, further comprising means for storing a selected part of the model in the memory.

16. A model builder according to any of the preceding claims, wherein a first function may be an input variable to a second function.

17. A model builder according to any of the preceding claims, wherein the function builder further comprises tools for user definition of a mathematical operator.

18. A model builder according to any of the preceding claims, further including tools for saving a model document as a standalone Java .jar file.

19. A model builder according to any of the preceding claims, further including tools for saving a model document as a standalone application, e.g. a Java Applet, a serverside application e.g. a Java Servlet or an .exe file.

20. A model builder according to any of the preceding claims, further including tools for documenting the structure of a specific model document.